



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0411; Product Identifier 2018-SW-061-AD]

RIN 2120-AA64

Airworthiness Directives; Leonardo S.p.a. Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for certain Leonardo S.p.a. (Leonardo) Model A119 and AW119MKII helicopters. This proposed AD would require repetitive borescope inspections of the tail rotor gearbox (TGB) and depending on the inspection results, removing the TGB from service. This proposed AD was prompted by reports of corrosion on the internal surface of the 90-degree TGB output shaft. The actions of this proposed AD are intended to address an unsafe condition on these products.

DATES: The FAA must receive comments on this proposed AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Docket: Go to <https://www.regulations.gov>. Follow the online instructions for sending your comments electronically.
- Fax: 202-493-2251.

- Mail: Send comments to the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590-0001.

- Hand Delivery: Deliver to the “Mail” address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Examining the AD Docket

You may examine the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0411; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the European Union Aviation Safety Agency (previously European Aviation Safety Agency) (EASA) AD, any comments received, and other information. The street address for Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.

For service information identified in this proposed rule, contact Leonardo S.p.a. Helicopters, Emanuele Bufano, Head of Airworthiness, Viale G.Agusta 520, 21017 C.Costa di Samarate (Va) Italy; telephone +39-0331-225074; fax +39-0331-229046; or at <https://www.leonardocompany.com/en/home>. You may view the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177.

FOR FURTHER INFORMATION CONTACT: Rao Edupuganti, Aviation Safety Engineer, Regulations and Policy Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5110; email rao.edupuganti@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to participate in this rulemaking by submitting written comments, data, or views. The FAA also invites comments relating to the economic, environmental, energy, or federalism impacts that might result from adopting the proposals in this document. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit only one time.

The FAA will file in the docket all comments received, as well as a report summarizing each substantive public contact with FAA personnel concerning this proposed rulemaking. Before acting on this proposal, the FAA will consider all comments received on or before the closing date for comments. The FAA will consider comments filed after the comment period has closed if it is possible to do so without incurring expense or delay. The FAA may change this proposal in light of the comments received.

Discussion

EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD No. 2018-0156, dated July 24, 2018 (EASA AD 2018-0156) to correct an unsafe condition for Leonardo (formerly Finmeccanica S.p.A., AgustaWestland S.p.A., Agusta S.p.A.; and AgustaWestland Philadelphia Corporation, formerly Agusta Aerospace Corporation) Model A119 and AW119MKII helicopters with

90-degree TGB part number (P/N) 109-0440-06-101 or P/N 109-0440-06-105 having serial number 167, 169 through 172 inclusive, 215 through 225 inclusive, 227, 230, 232, 233, AW268, K3, K16, M47, or L29, installed. EASA advises of two reported occurrences of corrosion on the internal surface of the 90-degree TGB shaft installed on Model A119 helicopters. Further analysis identified a specific batch of parts that may be susceptible to similar conditions. Due to design similarity, Model AW119MKII helicopters are also affected.

EASA states that this condition, if not detected and corrected, could lead to failure of the tail rotor, possibly resulting in reduced control of the helicopter. Accordingly, EASA AD 2018-0156 requires performing repetitive endoscope inspections on the internal surface of the 90-degree TGB output shaft for corrosion and depending on the findings, replacing the TGB. EASA further states EASA AD 2018-0156 is considered an interim action and further AD action may follow.

FAA's Determination

These helicopters have been approved by EASA and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the European Union, EASA has notified the FAA about the unsafe condition described in its AD. The FAA is proposing this AD after evaluating all known relevant information and determining that an unsafe condition is likely to exist or develop on other helicopters of the same type designs.

Related Service Information Under 1 CFR part 51

The FAA reviewed Leonardo Helicopters Alert Service Bulletin No. 119-090, dated July 23, 2018, for Model A119 and AW119MKII helicopters, which contains

procedures for conducting an endoscope inspection of the internal surface of the 90-degree TGB output shaft for corrosion. This service information also specifies replacing the TGB if corrosion is found.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Proposed AD Requirements

This proposed AD would require compliance with certain procedures described in the manufacturer's service bulletin. For helicopters with an affected 90-degree TGB output shaft installed, this proposed AD would require within 25 hours time-in-service (TIS) or 3 months, whichever comes first, and thereafter at intervals not to exceed 100 hours TIS or 6 months, whichever occurs first, borescope inspecting the internal surface of the 90-degree TGB output shaft for corrosion. If there is corrosion, this proposed AD would require removing the TGB from service before further flight.

Interim Action

The FAA considers this proposed AD to be an interim action. An investigation is ongoing and if final action is later identified, the FAA might consider further rulemaking then.

Costs of Compliance

The FAA estimates that this proposed AD would affect 96 helicopters of U.S. Registry. The FAA also estimates that operators may incur the following costs in order to comply with this proposed AD. Labor costs are estimated at \$85 per work-hour.

Borescope inspecting the 90-degree TGB output shaft would take about 3 work-hours for an estimated cost of \$255 per helicopter and \$24,480 for the U.S. fleet per inspection cycle.

Replacing a (overhauled) TGB would take about 18 work-hours and parts would cost about \$49,000 (overhauled) for an estimated cost of \$50,530 per helicopter.

According to Leonardo's service information, some of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals. The FAA does not control warranty coverage by Leonardo. Accordingly, the FAA has included all costs in the cost estimate.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

Leonardo S.p.a.: Docket No. FAA-2020-0411; Product Identifier 2018-SW-061-AD.

(a) Applicability

This AD applies to Leonardo S.p.a. Model A119 and AW119MKII helicopters, certified in any category, with 90-degree tail rotor gearbox (TGB) part number (P/N) 109-0440-06-101 or 109-0440-06-105 having serial number 167, 169 through 172 inclusive, 215 through 225 inclusive, 227, 230, 232, 233, AW268, K3, K16, M47, or L29, installed.

(b) Unsafe Condition

This AD defines the unsafe condition as corrosion on the internal surface of the 90-degree TGB output shaft. This condition could result in failure of the 90-degree TGB output shaft and reduced control of the helicopter.

(c) Comments Due Date

The FAA must receive comments by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

(d) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(e) Required Actions

(1) Within 25 hours time-in-service (TIS) or 3 months, whichever occurs first, and thereafter at intervals not to exceed 100 hours TIS or 6 months, whichever occurs first, borescope inspect the entire internal surface of the 90-degree TGB output shaft for corrosion. Refer to Figure 3 of Leonardo Helicopters Alert Service Bulletin No. 119-090, dated July 23, 2018, for a depiction of the entry point for the borescope. If there is corrosion, before further flight, remove from service the TGB.

(2) After the effective date of this AD, do not install on any helicopter any 90-degree TGB P/N 109-0440-06-101 or 109-0440-06-105 that has serial number 167, 169 through 172 inclusive, 215 through 225 inclusive, 227, 230, 232, 233, AW268, K3, K16, M47, or L29, unless the actions required by paragraph (e)(1) of this AD have been done.

(f) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Safety Management Section, Rotorcraft Standards Branch, FAA, may approve AMOCs for this AD. Send your proposal to: Rao Edupuganti, Aviation Safety Engineer, Regulations and Policy Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5110; email 9-ASW-FTW-AMOC-Requests@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, the FAA suggests that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office before operating any aircraft complying with this AD through an AMOC.

(g) Additional Information

The subject of this AD is addressed in European Union Aviation Safety Agency (previously European Aviation Safety Agency) (EASA) AD No. 2018-0156, dated July 24, 2018. You may view the EASA AD on the Internet at <https://www.regulations.gov> in the AD Docket.

(h) Subject

Joint Aircraft Service Component (JASC) Code: 62, Tail Rotor Gearbox.

Issued on April 20, 2020.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service

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